

IN THE SPECIFICATION

Please replace the paragraph beginning on page 1, line 6 with the following paragraph:

A1  
The present invention may relate to co-pending applications U.S. Serial No. \_\_\_\_\_ (~~Attorney Docket No. 00-187/1496.00043~~) 09/748,641, filed December 22, 2000, U.S. Serial No. \_\_\_\_\_ (~~Attorney Docket No. 00-166/1496.00046~~) 09/748,036, filed December 22, 2000, and U.S. Serial No. \_\_\_\_\_ (~~Attorney Docket No. 00-162/1496.00047~~), ~~filed concurrently~~ 09/748,796, filed December 22, 2000, which are hereby incorporated by reference in their entirety.

Please replace the paragraph beginning on page 2, line 2 with the following paragraph:

A2  
Java is a programming language invented by Sun Microsystems, Inc. Applications developed using the Java language can be run on any platform equipped with a Java Virtual Machine (JVM). Applications written with Java ~~can not~~ cannot match the performance of applications written in C/C++ and ~~compiled~~ compiled directly into a native code. Several techniques to reduce the performance gap have been developed. However, while the techniques are successful in terms of narrowing the performance gap, the

A2 success is at the cost of extra memory foot-print or a lack of compatibility to past designs.

---

Please replace the paragraph beginning on page 3, line 20 with the following paragraph:

---

A3 A dedicated set of registers can be used as a top of JVM stack. Dedicated registers are used in hardware versions of JVM, like ~~picoJava~~ picoJava<sup>TM</sup> from Sun. The main drawback of using dedicated registers is that the processor must have a dedicated register stack and special instructions for manipulating the stack. Most of available processors do not have the dedicated register stack or the special instructions.

---

Please replace the paragraph beginning on page 16, line 18 with the following paragraph:

---

A4 The circuit 126 may be a multiplexer circuit that may present the signal CPU\_DOUT. The circuit 126 generally selects what data is presented to the CPU 102. When no translation is required, the circuit 126 may be configured to select the signal ~~MEM\_DI~~ MEM\_DIN as the signal CPU\_DOUT. During an active state of the circuit 100, when the CPU 102 reads instructions, the circuit 126 may be configured to select an output of the NIG 212 as the

A4 signal CPU\_DOUT. Otherwise, the circuit 126 may be configured to select the signal MEM\_DIN as the signal CPU\_DOUT. When the circuit 100 decides to refill the CPU registers stack, the circuit 126 may be configured to select an output of the register block 200. The register block 200 may serve as a bridge between the Extension Stack 202 and the CPU 102.

---

Please replace the Abstract of the Disclosure with the following paragraph:

---

A5 An apparatus comprising a processor and a translator circuit. The processor may (i) comprise a number of internal registers and (ii) be configured to manipulate contents of ~~said the~~ internal registers in response to instruction codes of a first instruction set. The translator circuit may be configured to implement a stack using one or more of the internal registers of ~~said the~~ processor.

---